Purpose of StudyThe purpose of this study was to evaluate the immunization rates for children enrolled in Qualified Health Plans (QHPs). This study analyzed rates for individual vaccine series in addition to whether or not the children were fully immunized by the age of two. In order to be considered fully immunized, the children must have received the entire series of each of the following vaccinations:

- 1. Diphtheria, Tetanus, and Pertussis (DTP or DtaP)
- 2. H. Influenza type B (Hib)
- 3. Polio (OPV or IPV)
- 4. Hepatitis B (Hep B)
- 5. Measles, Mumps, and Rubella (MMR)

Immunization data for the varicella (chickenpox) vaccine were also abstracted from the medical records, but varicella vaccination was not a requirement for full immunization status for External Quality Review 1999 (EQR).

The population for the immunization study included children who reached the age of two during 1999. The review included services provided prior to the enrollee's second birthday. To meet selection criteria, the child must have been continuously enrolled for the 12 months prior to the child's second birthday, and must have received at least one office visit during the study period.

Study QuestionStudy questions developed for EQR 1999 were used to formulate indicators for data abstraction. The study question used to evaluate immunization status is shown below:

• Are enrollees fully immunized by the age of two years?

Limitations

The immunization study specifications for EQR 1999 were similar to the specifications for EQR 1997 and 1998. All three studies selected children who achieved the age of two during the review period. The enrollment requirement for EQR 1999 was 12 months continuous enrollment prior to the second birthday, which differed from the 1997 and 1998 requirement of six months continuous enrollment.

Results

Immunizations

If a two-year-old was fully immunized, all individual vaccines were recorded as complete. When the enrollee was not fully immunized, the status of each vaccine series was recorded individually. QHPs were provided a list of enrollees who were identified as not being fully immunized, and given an opportunity to supplement the abstracted data. The weighted aggregate rate for EQR 1999 was 73%. This was similar to the rate of 75% for EQR 1998, which was similar to the 79% rate reported in 1997. The National Medicaid HEDIS Benchmark study reported a rate of 56% in 1999 for children enrolled in Medicaid. Figure 3.1 displays the percentage of enrollees who were fully immunized by the age of two by QHP. The performance rates for seven of the 17 QHPs studied for this measure were above the weighted aggregate rate.

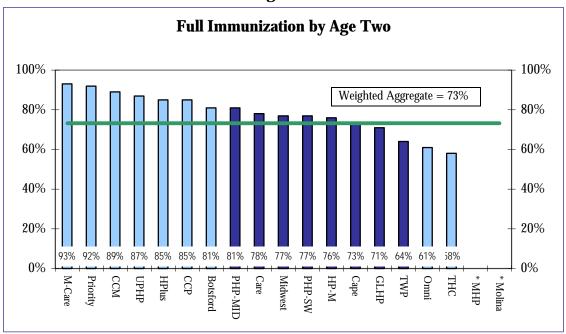


Figure 3.1

^{*} Rates not displayed; based on sample or population < 30.

Table 3.1 displays the weighted aggregate results of the medical record review for the five required immunizations. The number of vaccinations required for each series is displayed in parentheses following the abbreviation for the vaccine.

Table 3.1 Completion of Immunization Series in Aggregate

Immunization	Yes	No
DTP (4)	78%	22%
Hib (3 or 1 after 15 months)	91%	9%
OPV or IPV (3)	87%	13%
Hep B (3)	89%	11%
MMR (1)	88%	12%
Fully Immunized	73%	27%

The overall immunization rate (73%) was lower than any one of the individually completed immunization series because full immunization requires that the enrollee complete every series. For example, the enrollees with completed DTP series will not necessarily be the same enrollees who have completed the Hib series.

Table 3.2 displays the weighted aggregate results for immunization rates reported in the EQR 1997, 1998, and 1999 reviews.

Table 3.2 Immunization Results for EQR 1997 – 1999

	Weighted Aggregate		
Immunization	1997	1998	1999
DTP (4)	81%	81%	78%
Hib (3 or 1 after 15 months)	95%	87%	91%
OPV or IPV (3)	87%	88%	87%
Нер В (3)	86%	89%	89%
MMR (1)	91%	90%	88%
Fully Immunized	79%	75%	73%

Varicella Vaccine

⇒ 52% of two-year-olds received varicella vaccine by the age of two

Varicella immunization was collected as a baseline measurement. Varicella vaccination or proof of immunity is required by day care programs for children 15 months to five years of age (Michigan Immunization Update, 2000). Figure 3.2 illustrates that 52% of enrollees received varicella vaccination by age two.

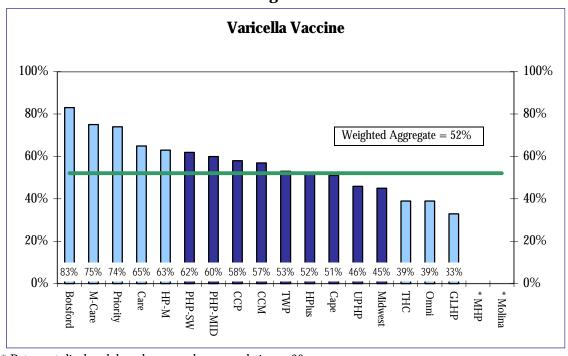


Figure 3.2

Full immunization rates for EQR 1999 were similar to the EQR 1998 rates. Seven of the health plans performed above the weighted average for full immunization for EQR 1999. M-Care and Priority Health Plan reported the highest rates at 93% and 92%, respectively. Botsford, M-Care and Priority Health Plan performed above the weighted aggregate for both full immunization and varicella vaccine.

^{*} Rates not displayed; based on sample or population < 30.

References

Michigan Department of Community Health. (Spring, 2000). Michigan Immunization Update: Chickenpox vaccine now required for day care kids. [Michigan Department of Community Health], p. 13.

National Committee for Quality Assurance. (2000). State of Managed Care Quality 2000, p. 35.